

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

<p>IN RE:</p> <p>OFFICE OF CONSUMER ADVOCATE, Petitioner,</p> <p>v.</p> <p>INTERSTATE POWER AND LIGHT COMPANY, Respondent</p>	<p>DOCKET NO. FCU-2016-0011</p>
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DIRECT TESTIMONY OF
DEE A. BROWN

1 **Q. Please state your name and business address.**

2 A. My name is Dee A. Brown. My business address is 1911 E. Anson St.,
3 Marshalltown, Iowa 50158.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by Interstate Power and Light (IPL) as Director, Customer
6 Operations – IPL West Region.

7 **Q. Please explain your educational background and your work**
8 **experience.**

9 A. I graduated from Buena Vista University in Storm Lake, Iowa, with a
10 Bachelor of Arts in Business Administration. I am responsible for
11 oversight of the day-to-day operations for our gas and electric systems in
12 the western region of the IPL territory. This includes employees
13 responsible for meter reading, electric line construction and maintenance,

1 gas maintenance and construction and field engineering. Prior to my
2 current role, I have held other positions within Energy Delivery at IPL,
3 including Director of Gas, Engineering and Services; Director of Asset
4 Care; and Regional Director for various areas.

5 **Q. What is the purpose of your testimony?**

6 A. I will provide a detailed explanation of how IPL staffs meter reading
7 responsibilities, identification of meter reading challenges, and specifically
8 will address temporary labor shortages over the last summer and early fall
9 that led to unanticipated additional customer bill estimates. I will conclude
10 with information on how IPL has addressed the situation to reduce the
11 number of meters that are not read in any given month.

12 **Q. Are you sponsoring any exhibits in this filing?**

13 A. Yes. I am sponsoring IPL Exhibit Brown Direct, which includes the
14 following schedules:

15 Schedule A: Meter Reader Job Duties;

16 Schedule B: 2016 IPL Meter Count;

17 Schedule C: Monthly No Read Report;

18 Schedule D: IPL Meter Read History 2011-2016;

19 Schedule E: Read Window Overview; and

20 Schedule F: Installed ERT Meter History.

21 **Q. Please describe what a meter reader does.**

22 A. Meter readers have the primary duty to obtain, on average, 350 meter
23 readings each day using a hand-held device. Meter readers are the face
24 of IPL to many of our customers as they are in the local neighborhood on

1 a monthly basis and are often approached by customers to answer
2 questions while reading the customer's meter. IPL Exhibit Brown Direct
3 Schedule A provides information on the job duties of a meter reader.

4 **Q. How many meters does IPL have, and how are they read?**

5 A. IPL has meters for both gas and electric facilities in our service territory.
6 This includes meters for residential, commercial and industrial customers.
7 The meter reading schedule includes 21 meter reading cycles, which are
8 scheduled each month. IPL Exhibit Brown Direct Schedule B provides the
9 breakdown of the number of meters by gas and electric meters.

10 IPL schedules to read every meter every month, a total of ~723,000
11 meters, on average. Meter reading on a monthly basis is the norm even
12 for utilities that utilize automated metering reading (AMR). However,
13 fewer and fewer utilities are obtaining meter reads manually, with electric
14 utilities installing over 65 million meters with AMR capability, covering
15 more than 50% of U.S. households, as of year-end 2015.¹

16 **Q. Please describe the multi-day window that exists for each meter**
17 **reading cycle.**

18 A. Meter readers download the route cycle to be read each day into their
19 handheld unit. Each route cycle has a four-day window in which the meter
20 read can be obtained and entered into the system to be used for billing.
21 The reads obtained from each day of the route cycle are uploaded at the
22 end of each shift. The meter reads are then transmitted to the Data

¹ Cooper, Adam. *Electric Company Smart Meter Deployments: Foundation for A Smart Grid*, at p.2. The Edison Foundation, Oct. 2016. Last accessed: Nov. 17, 2016. Available: <http://www.edisonfoundation.net/iei/publications/Documents/Final%20Electric%20Company%20Smart%20Meter%20Deployments-%20Foundation%20for%20A%20Smart%20Energy%20Grid.pdf>

1 Acquisition department for processing. More details of each day of the
2 four-day window are shown below:

3 Day 1 – Available: First day readers have the route cycle
4 available to download and read. The Billing department has
5 three calendar days to review any generated To Dos² and
6 correct a bill (if needed).

7 Day 2 – Read: Target read day for this route cycle. Billing
8 has two days to review any generated To Dos and correct a
9 bill (if needed).

10 Day 3 – Finish: Scheduled finish day for route cycle. Billing
11 has one day to review any generated To Dos and correct a
12 bill (if needed).

13 Day 4 – Force: If meters in this route cycle have not been
14 read, the unread meters will be forced to the billing system,
15 where it will estimate usage using the original available date
16 for the cycle. If the read comes in on day four of the window,
17 the Hi/Lo check To Do³ may be initiated, but it will also auto-
18 close and send the bill out with an estimated read (because
19 it is a “force day”). As a result, the Billing department does
20 not have an opportunity to work the To Do (if one is created).
21 This issue is being addressed by system upgrades currently
22 in progress, as discussed in the direct testimony of IPL
23 witnesses Gregg E. Lawry and Ms. Stibb.

24 **Q. How does a meter reader record electric and gas reads?**

25 A. Meter readers physically read and input information into a hand-held
26 device for all manually read meters, which is over 99% of the meters in
27 IPL’s territory. Encoder Receiver Transmitter (ERT) meters are utilized for
28 automated meter reading of unsafe or inaccessible meters. These meters
29 do not require any manual entry from the meter readers.

² As stated in the testimony of IPL witness Shirley K. Stibb, a To Do is a follow-up work item generated by the system, triggered by an exception or based on a business-validation rule. Hi/Lo check To Dos require manual review and action to resolve.

³ Hi/Lo check To Dos are described further in the direct testimony of Ms. Stibb.

1 **Q. Do mistakes sometimes occur in recording electric or gas reads?**

2 A. Yes. Meter reading is a manual process with the potential for human error.
3 Parameters are in place in the hand-held to alert meter readers when a
4 read they have just entered needs to be confirmed. If the entered usage
5 varies from historical usage, the meter readers are required to reread the
6 meter and reenter the information. If the second entry matches the first,
7 the read is accepted. If the meter read does not match, a third entry is
8 required.

9 **Q. What are the reasons why a meter may not be read and an estimate**
10 **required?**

11 A. It is IPL's goal to read every meter, and every meter is scheduled to be
12 read every month. That goal can be challenged by several factors outside
13 of IPL's direct control. First, obtaining a meter read may be challenged by
14 a situation that could lead to physical harm of a meter reader or others—
15 these situations may include hazardous conditions, animals, or weather
16 factors. Our first priority is employee safety, therefore, our meter readers
17 are not allowed to put themselves in hazardous situations. Another
18 reason why a meter may not be read in a particular cycle may be a result
19 of staffing constraints (illness, family emergencies, injury, unexpected
20 turnover, and unplanned absences). IPL strives to staff its meter reading
21 department no differently than it does all key departments in the
22 organization. IPL focuses on staffing competent, engaged meter readers,
23 and needs to balance attrition and turnover while avoiding overstaffing to
24 prevent higher costs to customers associated with employing readers who

1 are not needed.

2 **Q. OCA witness Dr. Keva Hibbert, at page 5 of her direct testimony,**
3 **indicates that IPL was not in compliance with 199 IAC 20.3(6), which**
4 **requires that “[r]eadings of all meters used for determining charges**
5 **and billings to customers shall be scheduled at least monthly and for**
6 **the beginning and termination of service.” Relatedly, OCA witness**
7 **Brian W. Turner at page 9 of his testimony suggests that IPL be**
8 **ordered to read all meters on a monthly basis. Do you believe her**
9 **statement is accurate or his recommendation is sound?**

10 A. No. IPL schedules meters for monthly reading and for the beginning and
11 termination of service. Estimates are necessary for various reasons, as
12 described in the direct testimony of Mr. Lawry. IPL schedules a read
13 every month and makes every reasonable effort to obtain the read;
14 however, there are valid reasons why reads cannot be made every month.
15 Requiring every meter to be read each month is unrealistic when running
16 a system with over 700,000 scheduled manual reads every month and, in
17 addition, does not appear to be required by IUB rules.

18 **Q. How many meter readers did IPL have when its Customer Care and**
19 **Billing system (CC&B) went live?**

20 A. When CC&B went live, in mid-February 2016, IPL employed 99 full-time
21 meter readers.

22 **Q. Was the number of meter readers in February 2016 less than IPL had**
23 **employed previously?**

24 A. No.

1 **Q. How many meter readers did IPL employ through the summer and**
2 **early fall of 2016?**

3 A. IPL employed between 101-103 meter readers during the summer and
4 early fall of 2016.

5 **Q. If IPL had similar numbers of meter readers employed in the summer**
6 **and early fall of 2016, why did it have more bills estimated than**
7 **normal?**

8 A. IPL staffs each zone at a level that will allow for adequate meter read
9 numbers with the understanding that not all meter readers will be available
10 every day. However, there are isolated circumstances when higher than
11 normal unanticipated injuries, illnesses, turnover and other unplanned
12 absences reduce the number of available meter readers to complete all
13 the routes. IPL attempts to limit the number of meters that are not read
14 through the use of temporary meter readers and, when possible,
15 temporarily reassigning employees to areas where short-term staffing
16 situations may exist.

17 Some of these circumstances occurred in Cedar Rapids during the
18 summer of 2016. Cedar Rapids is IPL's largest customer base and has
19 the greatest density of meters due to its urban nature. As a result, the
20 number of meters that can be read in a normal day is greater than in rural
21 areas, as there is less travel required to get to the route and there is less
22 walking/drive time between meter reads. Accordingly, when one or more
23 of the meter readers in Cedar Rapids is not available, the impact on the
24 total amount of meters that are not read is proportionately larger than it is

1 when the unavailability occurs in a more rural area of the state.

2 To read the meters in the Cedar Rapids area, a headcount of 15
3 readers is typically required. While we had that many full-time readers
4 during the summer of 2016, we experienced an abnormally high
5 occurrence of meter reader unavailability due to the factors listed below:

- 6 • There were three employees who took bereavement time in
7 June and July. One was off of work for a week and the
8 others for several days.
- 9 • Three employees were on light duty due to injuries.
- 10 • Three employees took other positions within the
11 company. To mitigate the effect that these transitions can
12 have on the number of meters read, internal employees
13 cannot leave for their new position for up to 60 days.
14 However, the transition dates for those three employees fell
15 within that timeframe.
- 16 • June and July are high vacation months so we normally
17 have several employees that take vacation each day. To
18 mitigate the amount of meters that are not read, we limit the
19 amount of employees that can request vacation to three
20 employees per day.

21 To help address the impact of these absences, we hired a
22 temporary meter reader and three new permanent hires; due to the on-
23 boarding process, these employees came on gradually through June, July,
24 and August. However, once the new employees are on-boarded, they are
25 still learning the routes and are not able to reach the productivity levels of
26 a seasoned reader.

27 **Q. Has IPL taken any steps to increase the number of meter readers**
28 **during and since the summer and early fall of 2016?**

29 A. Yes, the average number of meter readers has increased slightly

1 throughout 2016 as discussed above. In addition, IPL continuously
2 evaluates and adjusts headcount through new hires and temporary
3 positions. This is especially true as we head into the winter months when
4 weather can impact the pace at which meter readers are able to complete
5 reads. The specific actions IPL is taking to maintain adequate headcount
6 include:

- 7 • Addition of two meter readers in Cedar Rapids in the fourth
8 quarter of 2016 in preparation for winter weather conditions
9 and to reduce the number of no-reads when staff turnover
10 occurs. A meter reader in an urban area like Cedar Rapids
11 can read an average of 400 meters per day. Thus, the
12 addition of two meter readers should significantly increase
13 our ability to reduce the number of meters not read, while not
14 over-staffing.
- 15 • Addition of a temporary meter reader in Ottumwa for the
16 planned upcoming temporary leave of an existing meter
17 reader.
- 18 • Transition of a meter reader position from Decorah to
19 Fairfield (in the Ottumwa zone) to better align the number of
20 meter readers with the number of meters to be read.
- 21 • Addition of a temporary meter reader in the West region of
22 Iowa that will be available in that region in order to cover for
23 absences of regular meter reader staff.

24 These changes are designed to address fluctuations in meter
25 reader availability and, therefore, the number of meters that are not read
26 at any given time.

27 **Q. OCA Witnesses Dr. Hibbert, at page 14 of her direct testimony, and**
28 **Mr. Turner, at page 4 of his testimony, suggest that IPL's planning**
29 **for the staffing level for meter readers was inadequate in the summer**
30 **and early fall of 2016. Do you agree?**

1 A. No. As we always do, we analyze the need for staffing and make every
2 reasonable effort to have adequate staff on board. For the reasons I
3 noted, we did not have as many meter reading staff available as we
4 planned for in certain parts of our territory during this period.

5 **Q. As a result of the changes you have described in this testimony, are**
6 **there fewer bills being estimated due to no-read situations than there**
7 **were during the summer and early fall of 2016?**

8 A. As shown on IPL Exhibit Brown Direct Schedule C, the changes
9 addressed the number of no-reads quite well. In November, two meter
10 readers left the company, leading to a higher number of no-reads in the
11 Cedar Rapids area in November; however, the hiring plans outlined above
12 will mitigate the number of no-reads in Cedar Rapids going forward. IPL
13 staff regularly monitors staffing assignments and makes adjustments to
14 read as many meters as possible. Finally, IPL Exhibit Brown Direct
15 Schedule D shows that historically, the number of no-reads in IPL's
16 territory is slightly higher in 2016 than in 2015, but lower than in prior
17 years.

18 In addition, IPL's meter readers are working to increase the number
19 of reads that occur on Days 1-3 of the billing window to reduce the
20 likelihood of estimated meter reads; the additional system changes that
21 complement this effort are described in Ms. Stibb's and Ms. Cigrand's
22 testimony. IPL Exhibit Brown Direct Schedule E reflects the progress
23 made in this area through November 21, 2016.

1 **Q. Is IPL taking any other measures to reduce the number of no-reads?**

2 A. Yes. IPL is installing additional ERT meters in inaccessible areas or
3 where hazards exist that make getting an accurate read difficult. IPL
4 Exhibit Brown Direct Schedule F reflects the continued increase in the
5 installation of ERT meters. In addition, Ms. Cigrand provides additional
6 detail on actions IPL customer service representatives are taking to reach
7 out to customers with multiple estimated bills to ensure IPL meter readers
8 can get access to the meters. Finally, Ms. Stibb provides additional
9 information on enhancements to IPL's bill to further alert customers when
10 they are receiving estimated bills. Some meter inaccessibility issues are
11 within customer control (dogs, locked gates, etc.) and further alerting them
12 to this issue and encouraging them to contact us can help lower the
13 number of meters that cannot be read.

14 **Q. Does this conclude your direct testimony?**

15 A. Yes.

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AFFIDAVIT OF
DEE A. BROWN

STATE OF IOWA)
) ss.
COUNTY OF LINN)

I, Dee A. Brown, being first duly sworn on oath, depose and state that I am the same Dee A. Brown identified in the Direct Testimony; that I have caused the Direct Testimony, including any exhibits, to be prepared and am familiar with the contents thereof; and that the Direct Testimony, including any exhibits, is true and correct to the best of my knowledge and belief as of the date of this Affidavit.

/s/ Dee A. Brown
Dee A. Brown

Subscribed and sworn to before me,
a Notary Public in and for said County
and State, this 23rd day of November, 2016.

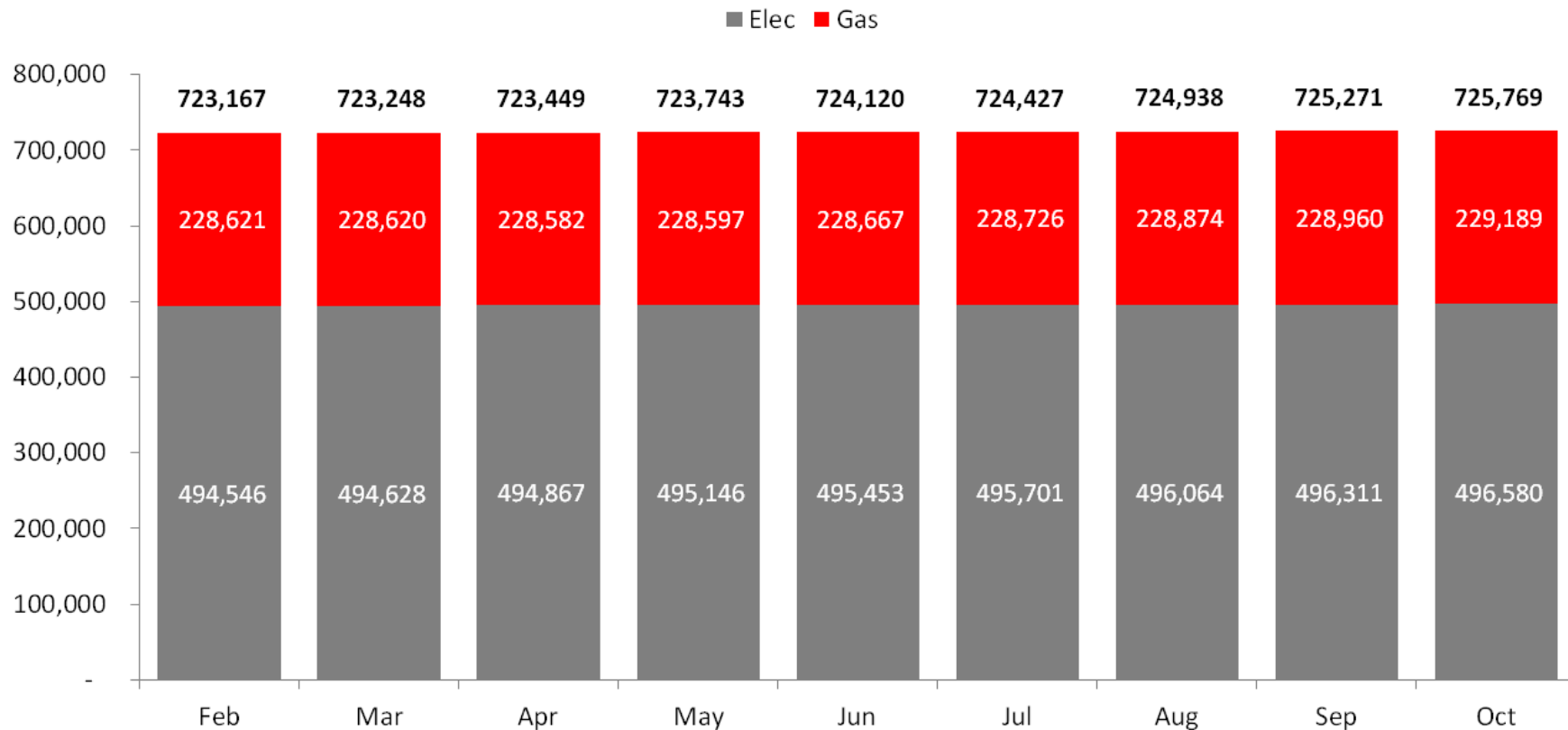
/s/ Tonya A. Bender
Tonya A. Bender
Notary Public
My commission expires on January 28, 2017

Schedule A

Meter Readers Job Duties

- Accurately read and record meter readings, includes resetting demand meters and changing charts, tapes or cartridges.
- Arrange appointments or self-reads for inside meters.
- Report and replace broken or missing meter seals.
- Report damage to meters and signs of tampering.
- Maintain good public relations with customers.
- Verify customer meter numbers.
- Explain company policies and report complaints and questions.
- Observe and report all metering and service installations; report irregular or hazardous conditions.
- Upload and download porta-processors for information transfer.
- Complete final read requests for customers and conduct door postings.
- Read load research meters using hand held devices such as a probe (no lap tops).
- May change cartridges in residential/commercial meters.
- Check and record meter readings sent in by customers and estimate use when readings are not available.
- Participate in safety meetings.
- May read meters inside substations or near energized facilities (when properly trained).
- Read and record meter readings from all residential, commercial, industrial and rural meters using an Itron handheld device.

2016 IPL Meter Count



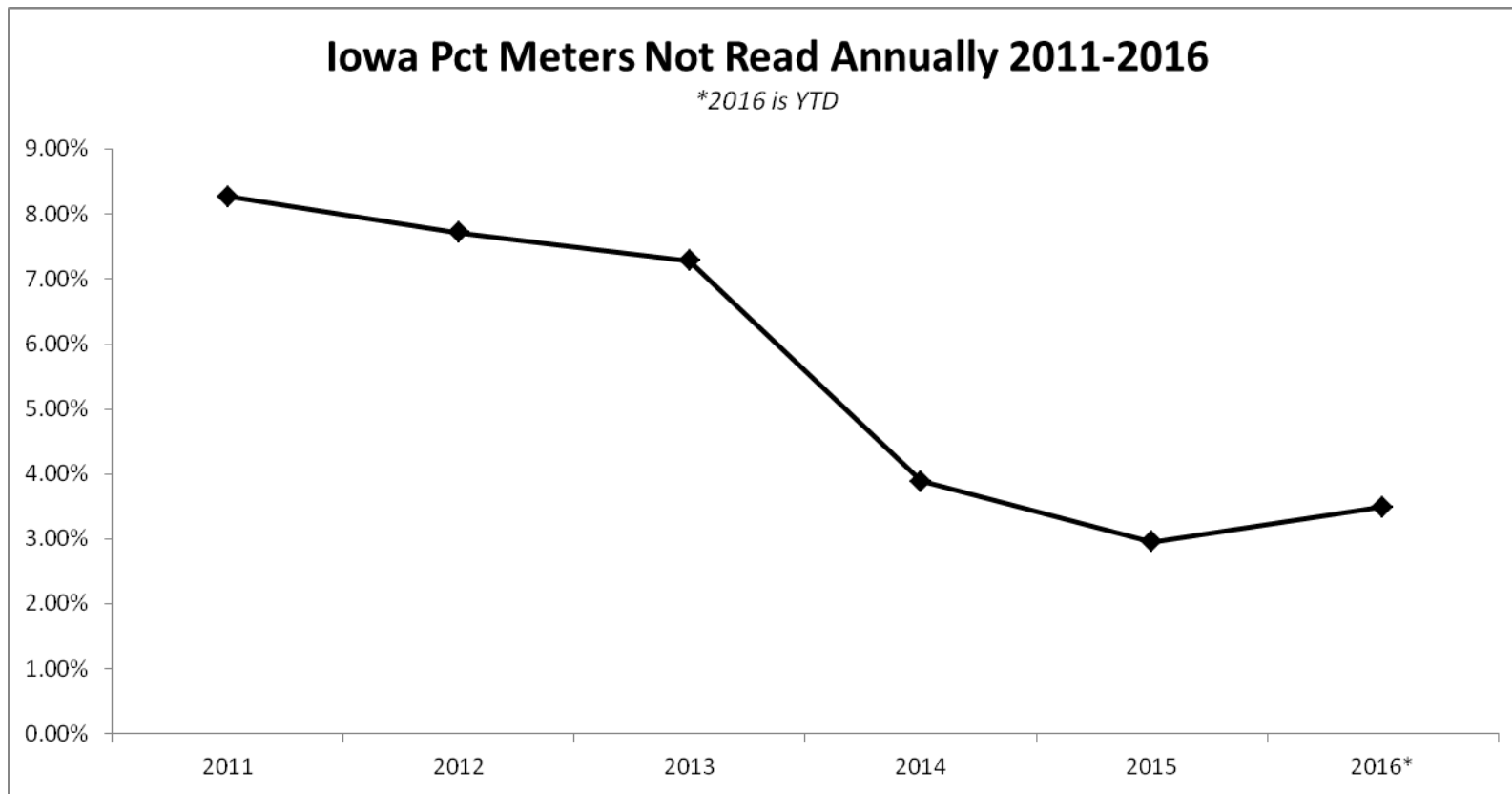
Schedule C

2016 Monthly No Read Report by Zone

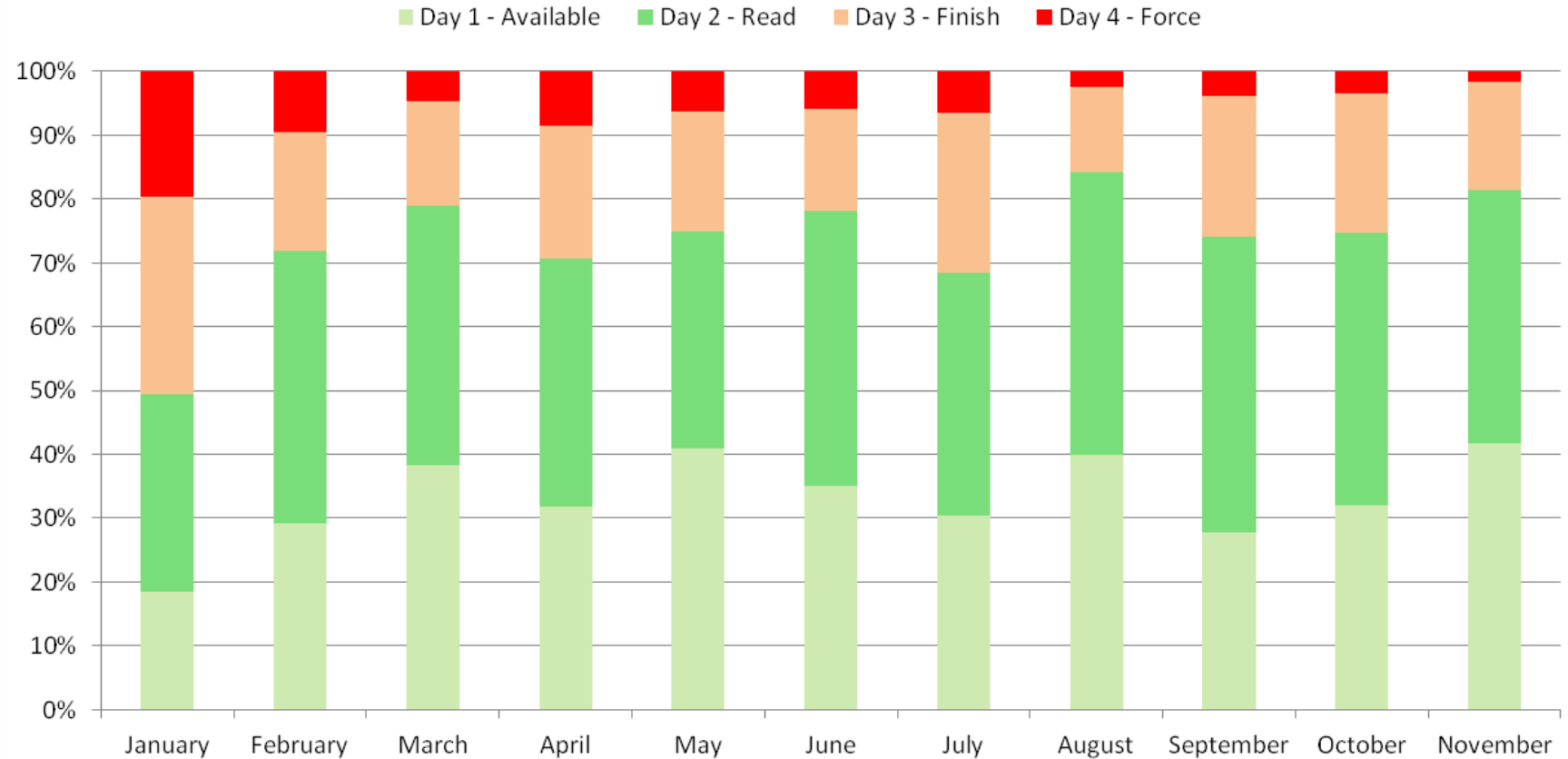
(Zone is determined by the shop reading the route)

	January	February	March	April	May	June	July	August	September	October	November*	December	YTD Average
Ames	14.99%	16.78%	0.85%	6.17%	8.50%	3.24%	1.52%	1.31%	2.02%	1.10%	0.80%		5.27%
Centerville	9.51%	8.46%	1.91%	1.82%	2.89%	2.19%	3.98%	2.53%	1.75%	1.74%	2.83%		3.62%
Creston	9.74%	3.78%	2.60%	0.80%	0.75%	1.78%	1.03%	4.53%	5.12%	1.28%	2.28%		3.08%
Marshalltown	6.85%	7.96%	0.66%	1.05%	0.75%	0.93%	1.02%	0.98%	0.98%	0.71%	1.26%		2.11%
Mason City	4.93%	15.59%	1.02%	1.01%	0.80%	0.89%	0.88%	0.89%	0.85%	1.05%	0.68%		2.62%
Spirit Lake	37.20%	38.40%	8.28%	17.70%	2.48%	2.39%	3.59%	1.57%	3.34%	2.25%	0.92%		10.89%
West Region	11.97%	14.38%	1.85%	3.99%	2.94%	1.80%	1.60%	1.58%	1.92%	1.17%	1.20%		4.08%
Burlington	0.17%	0.10%	0.11%	0.10%	0.12%	0.10%	0.13%	0.17%	0.23%	0.20%	0.21%		0.15%
Cedar Rapids	6.52%	3.08%	1.16%	1.73%	1.58%	12.71%	14.84%	1.78%	4.10%	2.90%	9.93%		5.41%
Clinton	1.07%	0.80%	0.68%	0.61%	0.73%	0.92%	0.99%	1.45%	1.07%	0.84%	0.65%		0.89%
Decorah	7.26%	3.39%	0.58%	0.29%	0.38%	1.73%	0.41%	0.67%	1.32%	0.50%	0.32%		1.54%
Dubuque	0.73%	0.82%	0.62%	0.66%	0.48%	0.64%	0.69%	0.79%	0.71%	0.51%	0.42%		0.65%
Keokuk	0.33%	0.32%	0.20%	0.15%	0.13%	0.20%	0.23%	0.23%	0.34%	0.17%	0.19%		0.23%
Keokuk	0.98%	0.81%	0.31%	0.31%	0.34%	0.31%	0.30%	0.41%	0.37%	0.42%	0.59%		0.47%
Oelwein	0.98%	0.81%	0.31%	0.31%	0.34%	0.31%	0.30%	0.41%	0.37%	0.42%	0.59%		0.47%
Ottumwa	6.77%	1.29%	1.19%	1.83%	2.42%	3.96%	6.30%	5.57%	13.23%	9.62%	7.16%		5.37%
East Region	3.98%	1.69%	0.81%	1.08%	1.14%	5.23%	6.27%	1.89%	3.89%	2.80%	4.67%		3.01%
IPL TOTAL	7.51%	7.29%	1.27%	2.37%	1.93%	3.72%	4.21%	1.75%	3.02%	2.08%	3.12%		3.48%

*November data through 11/21/16



2016 IPL Read Window Overview



Installed ERT Meter History

